

Appl. No. 10/015,455  
Amendment dated November 7, 2003  
Reply to Office Action of August 7, 2003

REMARKS

Claims 1, 5-9, and 13-16 have been amended by this response. New claims 17-18 have been added. Claims 1-18 remain in the case and are presented for reconsideration. Minor amendments have been made to the specification. No new matter has been added.

The Examiner rejected claim 1 under 35 USC § 102(b) as being clearly anticipated by *Kazik* (U.S. Pat. No. 3,815,586). This rejection is respectfully traversed.

The Examiner stated that *Kazik* teaches an apparatus for a physically-challenged person to receive vestibular motion. The Examiner stated that the chair has wheels and therefore the chair can be moved in any desired movement, including one that would induce vestibular motion therapy. The Examiner further stated that the chair has an adjustable torso support 38 and an adjustable headrest support 40.

Anticipation under 35 USC 102 requires the presence in a single prior art reference disclosure of each and every element of the claimed invention arranged as in the claim. The Examiner has not established that *Kazik* discloses each and every element of the invention in claim 1, as amended by this response. *Kazik* discloses an orthopedic chair having headrest pads and scoliosis pads, the latter to apply appropriate pressure to the seated person's sides to treat curvature of the spine. *Kazik* does not teach an apparatus that includes an amusement-type carriage device. Furthermore, the scoliosis pads apply pressure to the sides of the person. They do not provide lateral torso support as recited in claim 1. The torso support provides restraint to the physically-challenged person while the amusement-type carriage device is in operation. Therefore, claim 1 is not anticipated by *Kazik*.

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The Examiner rejected claims 1, 2 and 4 under 35 USC § 102(b) as being clearly anticipated by *Hickman* (U.S. Pat. No. 4,807,870). This rejection is respectfully traversed.

The Examiner stated that *Hickman* teaches an apparatus for a physically-challenged person to receive vestibular motion. The Examiner stated that the walking trainer has wheels, therefore the trainer can be moved in any desired movement, including one that would induce vestibular motion therapy. The Examiner further stated that the trainer has an adjustable torso support 40, 41, an adjustable headrest support 50, 51, and a lap belt 38, 39.

The Examiner has not established that *Hickman* discloses each and every element of the invention in claim 1, as amended by this response. *Hickman* discloses a walking trainer device. Kazik does not teach an apparatus that includes an amusement-type carriage device, as recited in claim 1, as amended. Therefore, claim 1 is not anticipated by *Hickman*. Claims 2 and 4 depend from claim 1 and are not anticipated for at least the same reason that claim 1 is not anticipated by *Hickman*.

The Examiner rejected claim 9 under 35 USC § 102(b) as being clearly anticipated by *Coleman* (U.S. Pat. No. 6,154,690). This rejection is respectfully traversed.

The Examiner stated that *Coleman* teaches a wheelchair for enabling a person to receive vestibular motion. The Examiner stated that the wheelchair can be moved in any desired movement, including one that would induce vestibular motion therapy. The Examiner stated that the wheelchair also has an adjustable seat attached to a base by spring mechanism 24, and there is a safety belt S for adjustably supporting the torso and hip for providing lateral support. The Examiner stated that headrest 7c also is adjustable.

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The Examiner has not established that *Coleman* discloses each and every element of the invention in claim 9, as amended by this response. *Coleman* discloses an automated wheelchair, constructed to provide a therapeutic effect and calibrated to accommodate at least three seating configurations for a specific user. *Coleman* does not teach an apparatus that includes an amusement-type carriage device, as recited in amended claim 9. Therefore, claim 9 is not anticipated by *Coleman*.

The Examiner rejected claim 3 under 35 USC § 103(a) as being unpatentable over *Suhre* (U.S. Pat. No. 4,617,919) in view of *Keropian* (U.S. Pat. No. 3,640,571). This rejection is respectfully traversed.

The Examiner stated that *Suhre* teaches an apparatus for a physically-challenged person to receive vestibular motion. He stated that *Suhre* teaches a chair having wheels, therefore the chair can be moved in any desired movement, including one that would induce vestibular motion therapy. The Examiner stated that *Suhre* teaches an adjustable torso support 22 providing lateral support and an adjustable headrest and neck support 32. He stated that torso supports 22 only provide a very limited degree of lateral support for the torso, only preventing specific lateral movement. The Examiner stated that the torso support of *Keropian* would provide much more restraining support for the torso. He stated that the torso support of *Keropian* would provide an anterior and posterior movement restraint. He further stated that the torso support includes rotatable support arm 64 a plurality of vertically supported rods 20 with a plurality of locking screws in claim 24, a pair of adjustable hand brackets 84 and a pair of hand pads 72. The Examiner concluded that it would have been obvious to one of ordinary skill in the art to modify *Suhre* to use the torso support as

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taught by *Keropian* as an obvious equivalent alternative means for restraining the person with much more support and restraint.

*Suhre* discloses a wheelchair having a plurality of posture supports for adjustably supporting the neck, thoracic cavity and thighs. Each of the posture supports is independently and three-dimensionally adjustable so as to therapeutically support a wheelchair bound individual. *Suhre* does not disclose an apparatus that includes an amusement-type carriage device as recited in amended claim 1 from which claim 3 depends. *Keropian* discloses a trunk support for use with wheelchairs and the like having contoured trunk support plates disposed laterally of and in supporting contact with the patient's trunk. The plates are secured to the backrest of the chair, are universally movable for adjustment to the patient's size and shape, and are locked in the supporting position. There is no teaching in *Keropian* of an amusement-type carriage device. Since neither *Suhre* nor *Keropian* teaches an amusement-type carriage device modified to provide torso support and headrest support to a physically-challenged person to provide motion therapy, claim 3 is allowable over the combination of these patents.

The Examiner rejected claims 1 and 5 – 8 under 35 USC § 103(a) as being unpatentable over *Tomita, et al.* (U.S. Pat. No. 6,152,828). This rejection is respectfully traversed.

The Examiner stated that *Tomita, et al.* teach an apparatus for enabling a physically-challenged person to receive vestibular motion therapy while riding a carriage device comprising an adjustable torso support 1260 mounted on the carriage and a headrest support 1280. The Examiner further stated that *Tomita, et al.* remain silent with regard to the adjustability of the headrest, but that providing an adjustable headrest to accommodate different size users would have been an obvious provision to one of ordinary skill in the art. Regarding claims 6 and 7, the Examiner stated

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that details of the operation of the simulation device is well within the realm of the artisan of ordinary skill. Regarding claim 8, the Examiner stated that *Tomita, et al.* teach that the appearance of the device can take any desired appearance. He further stated that simulating animals or cartoon characters is one of the conventional appearances used for these devices.

*Tomita et al.* disclose a rocking device and bodily sensation simulation apparatus. Three driving means are provided to control pitch, roll, and heave of the rocking object. A lock arm 1260 is provided for each seat 1240 and is means for fixing by pressing the user who is in a sitting down state on the seat 1240 or the spare seat 1242 (col. 3, lines 59-61). The user sits on the seat 1240 or the spare seat 1242 with a lock arm 1260 in an upwardly-sprung state and, for example, the user pulls down an operating end 1262 of the lock arm 1260 in one hand or both hands, whereby the user's head is inserted within the U-shaped portion of the operating end 1262 of the lock arm 1260 and the user's trunk (shoulders to stomach) is held with the L-shaped and U-shaped portions of the operating end 1262 of the lock arm 1260 (col. 4, lines 5-13). A locking arm that presses the user into a seated position of a rocking device is not a teaching of an adjustable torso support mounted on the amusement-type carriage device *for providing lateral support to the physically-challenged person* while seated on the amusement-type carriage device when the amusement-type carriage device is operating as recited in amended claim 1. Therefore, claim 1 is allowable over *Tomita et al.* With respect to claim 5, there is no teaching in *Tomita et al.* of a head switch for starting the operation of the amusement-type carriage device. With respect to claim 6, there is no teaching in *Tomita et al.* of a control panel for setting the run time of the amusement-type carriage device. With respect to claim 7, there is no teaching in *Tomita et al.* of a control panel that includes a timer relay for delaying the time between activation cycles of the amusement-type carriage device. With

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respect to claim 8, there is no teaching in *Tomita et al.* of an amusement-type carriage device being a modified Marsupilami device. Therefore, claims 5-8 which depend from claim 1 are allowable over *Tomita et al.*

The Examiner rejected claim 10 under 35 USC § 103(a) as being unpatentable over *Coleman* (U.S. Pat. No. 6,154,690) in view of *Sigafoo* (U.S. Pat. No. 4,728,119). This rejection is respectfully traversed.

The Examiner stated that *Coleman* teaches at column 8, lines 57 – 60 additional belts may be needed to help secure the person when moving from a sitting position to a standing position. The Examiner stated that *Sigafoo* teaches the convention of providing shoulder straps in addition to hip support for helping secure the person in a wheelchair. He concluded that it would have been obvious to one of ordinary skill in the art to modify *Coleman* to include additional straps such as shoulder straps as taught by *Sigafoo* to help secure the person within the wheelchair.

As discussed above, *Coleman* discloses an automated wheelchair, constructed to provide a therapeutic effect and calibrated to accommodate at least three seating configurations for a specific user. *Coleman* does not teach an apparatus that includes an amusement-type carriage device, as recited in amended claim 9, from which claim 10 depends. *Sigafoo* discloses a travel chair for elderly and physically handicapped persons. *Sigafoo* discloses the use of conventional restraint devices, such as aircraft and automotive seat belts, but not disclose use with an amusement-type carriage device. Therefore, claim 10 is allowable over the combination of *Coleman* and *Sigafoo*.

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The Examiner rejected claim 11 under 35 USC § 103(a) as being unpatentable over *Coleman* (U.S. Pat. No. 6,154,690) in view of *Keropian* (U.S. Pat. No. 3,640,571). This rejection is respectfully traversed.

The Examiner stated that *Coleman* teaches at column 8, lines 57 – 60 additional belts may be needed to help secure the person when moving from a sitting position to a standing position. The Examiner stated that *Keropian* teaches additional straps, including a pair of support arms as noted above for adding support for the person within the wheelchair. He concluded that it would have been obvious to one of ordinary skill in the art to modify *Coleman* to include additional straps such as the rotatable support arms and a pair of pads as taught by *Keropian* to provide additional support for the person during transport and movement from a sitting position to a standing position.

As discussed above, *Coleman* discloses an automated wheelchair, constructed to provide a therapeutic effect and calibrated to accommodate at least three seating configurations for a specific user. *Coleman* does not teach an apparatus that includes an amusement-type carriage device, as recited in amended claim 9, from which claim 11 depends. As also discussed above, *Keropian* discloses a trunk support for use with wheelchairs and the like having contoured trunk support plates disposed laterally of and in supporting contact with the patient's trunk. The plates are secured to the backrest of the chair, are universally movable for adjustment to the patient's size and shape, and are locked in the supporting position. There is no teaching in *Keropian* of an amusement-type carriage device. Since neither *Coleman* nor *Keropian* teaches an amusement-type carriage device modified to provide torso and hip support to a physically-challenged person to provide motion therapy, claim 11 is allowable over the combination of these patents.

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The Examiner rejected claim 12 under 35 USC § 103(a) as being unpatentable over *Coleman* (U.S. Pat. No. 6,154,690) in view of *Kornberg* (U.S. Pat. No. 5,308,028). This rejection is respectfully traversed.

The Examiner stated that *Coleman* already teaches that headrest 7c is adjustable to accommodate a specific neck position. The Examiner stated that the headrest appears to be merely height adjustable. He further stated that the headrest of *Kornberg* is also adjustable in the depth direction. The Examiner concluded that it would have been obvious to one of ordinary skill in the art to include a headrest adjustment means as taught by *Kornberg* to provide additional degrees of adjustability to the headrest to accommodate different neck conditions.

As discussed above, *Coleman* discloses an automated wheelchair, constructed to provide a therapeutic effect and calibrated to accommodate at least three seating configurations for a specific user. *Coleman* does not teach an apparatus that includes an amusement-type carriage device, as recited in amended claim 9, from which claim 12 depends. *Kornberg* discloses a headrest support for a wheelchair that is adjustable in horizontal and vertical planes. There is no teaching in *Kornberg* of an amusement-type carriage device. Since neither *Coleman* nor *Kornberg* teaches an amusement-type carriage device modified to provide an adjustable headrest mechanism for a physically-challenged person to provide motion therapy, claim 12 is allowable over the combination of these patents.

The Examiner rejected claim 13 - 16 under 35 USC § 103(a) as being unpatentable over *Coleman* (U.S. Pat. No. 6,154,690). This rejection is respectfully traversed.

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The Examiner stated that *Coleman* teaches many different control panels for controlling operation of the device. He stated that any such details of operation if not inherent in *Coleman* would have been an obvious provision.

As discussed above, *Coleman* discloses an automated wheelchair, constructed to provide a therapeutic effect and calibrated to accommodate at least three seating configurations for a specific user. *Coleman* does not teach an apparatus that includes an amusement-type carriage device, as recited in amended claim 9, from which claims 13-16 depend. With respect to claim 13, *Coleman* does not teach a head switch for starting the operation of the amusement-type carriage device. With respect to claim 15, *Coleman* does not teach a timer relay for delaying the time between activation cycles of the amusement-type carriage device. With respect to claim 16, *Coleman* does not teach a rocking horse amusement-type carriage device. Therefore, claims 13-16 are allowable over *Coleman*.

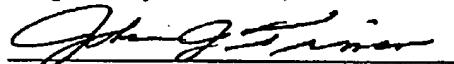
New claims 17 – 18 have been added by this response. Each of the new claims depends from an independent claim and recites that the amusement-type carriage device operates to provide at least one of a pitch, roll or yaw motion in three-dimensional space. Motion about at least one axis of rotation is a common feature of amusement-type carriage devices. However, except for *Tomita et al.*, none of the references cited disclose an amusement-type device. The *Tomita et al.* reference was distinguished above.

In view of the above, it is submitted that the rejections of the Examiner have been properly addressed and the pending claims are in condition for allowance. Such action at an early date is earnestly solicited. It is also requested that the Examiner contact Applicant's undersigned attorney

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at the telephone number listed below should this response not be deemed to place the application in condition for allowance.

Respectfully submitted,



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